



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,801	10/27/2003	Atsushi Watanabe	392.1831	1084

21171 7590 08/18/2006

STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER

GREENHUT, CHARLES N

ART UNIT	PAPER NUMBER
----------	--------------

3652

DATE MAILED: 08/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/692,801	Applicant(s) WATANABE ET AL.	
	Examiner Charles N. Greenhut	Art Unit 3652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 June 2006 and 25 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-47 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3/10/06</u> | 6) <input type="checkbox"/> Other: _____ |

I. Request for Continued Examination

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submissions filed on 6/16/06 and 5/25/06 have been entered.

III. Claim Rejections - 35 USC § 112

The following is a quotation from the relevant paragraphs of 35 U.S.C. 112:

(2) The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 1-47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention
 - 1.1. With respect to claims 1-2, 12-13, 24-25, 35-36, and 47, the phrase, "said hand from the first process" renders the claim indefinite because it is unclear how the hand is involved in the first process.
 - 1.2. With respect to claims 1-2, 12-13, 24-25, 35-36, and 47, the phrase, "conveying...at a predetermined position" renders the claim indefinite because it is unclear how something can be conveyed *at* a position.
 - 1.3. With respect to claims 1-2, 12-13, 24-25, 35-36, and 47, the phrase, "the container held by the first robot" lacks antecedent basis since there is no previous recitation of

the container held by the first robot, merely a robot that is capable of holding a container.

II. Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claim(s) 1-47 is/are rejected under 35 U.S.C. 102(b) as being anticipated by NELSON (US 6,723,174).

1.1. With respect to claim 1, NELSON discloses a first robot having an articulated arm (912) and hand (910) for holding and taking out a container and conveying the container to a predetermined position (900), a second robot for taking out an object contained in the container (970).

1.2. With respect to claim 2, NELSON discloses a first robot having an articulated arm (912) and hand (910) for holding and taking out a container and conveying the container to a predetermined position, a second robot with a sensor (980) for taking out an object contained in the container.

1.3. With respect to claim 3, NELSON additionally discloses the first robot changing position of the container.

1.4. With respect to claim 4, NELSON additionally discloses the first robot changing position of the container.

- 1.5. With respect to claim 5/1 and 5/2, NELSON additionally discloses the first robot having a sensor (714).
- 1.6. With respect to claim 6/1 and 6/2, NELSON additionally discloses a signal indicating the number of objects remaining in the container. (Col. 14 Li. 41-58)
- 1.7. With respect to claim 7/1 and 7/2, NELSON additionally discloses a signal output if the number of objects remaining in the container satisfies a predetermined condition.
- 1.8. With respect to claim 8/1 and 8/2, NELSON additionally discloses a second robot notifying the first.
- 1.9. With respect to claim 9/1 and 9/2, NELSON additionally discloses the robot notifying the process.
- 1.10. With respect to claim 10/1 and 10/2, NELSON additionally discloses the robot placing objects on a temporary placing table (990).
- 1.11. With respect to claim 11/1 and 11/2, NELSON additionally discloses the first robot changing position of the container to assist the second robot to eliminate an abnormality which is unable to be eliminated by the second robot (826).
- 1.12. With respect to claim 12, NELSON discloses a first robot having an articulated arm (912) and hand (910) for holding and taking out a container and conveying the container to a predetermined position (900), a second robot (970) for placing an object in the container, the first robot conveying the container to a second process.
- 1.13. With respect to claim 13, NELSON discloses a first robot having an articulated arm (912) and hand (910) for holding and taking out a container and conveying the

container to a predetermined position, a second robot with a sensor for placing an object in the container, the first robot conveying the container to a second process.

1.14. With respect to claim 14, NELSON additionally discloses the first robot changing position of the container.

1.15. With respect to claim 15, NELSON additionally discloses the first robot changing position of the container.

1.16. With respect to claim 16/12 and 16/13, NELSON additionally discloses the first robot having a sensor.

1.17. With respect to claim 17/12 and 17/13, NELSON additionally discloses a signal indicating the number of objects remaining in the container.

1.18. With respect to claim 18/12 and 18/13, NELSON additionally discloses a signal output if the number of objects remaining in the container satisfies a predetermined condition.

1.19. With respect to claim 19/12 and 19/13, NELSON additionally discloses a second robot notifying the first.

1.20. With respect to claim 20/12 and 20/13, NELSON additionally discloses the robot removing objects on a temporary placing table.

1.21. With respect to claim 21/12 and 21/13, NELSON additionally discloses the first robot changing position of the container to assist the second robot to eliminate an abnormality which is unable to be eliminated by the second robot.

1.22. With respect to claim 22, NELSON additionally discloses a visual sensor (Col. 14 Li 27).

- 1.23. With respect to claim 23, NELSON additionally discloses a three-dimensional position sensor.
- 1.24. With respect to claim 24, NELSON discloses holding and taking out a container containing objects by a first robot having an articulated arm (912) and hand (910) , conveying and positioning the container, and holding and taking out an object and conveying the object to a process using a second robot.
- 1.25. With respect to claim 25, NELSON discloses holding and taking out a container containing objects by a first robot having an articulated arm (912) and hand (910), conveying and positioning the container, holding and taking out an object and conveying the object to a process using a second robot and a sensor.
- 1.26. With respect to claim 26/24 and 26/25, NELSON additionally discloses the first robot changing position of the container.
- 1.27. With respect to claim 27/24 and 27/25, NELSON additionally discloses the first robot changing position of the container.
- 1.28. With respect to claim 28/24 and 28/25, NELSON additionally discloses holding the container based on the detected position.
- 1.29. With respect to claim 29/24 and 29/25, NELSON additionally discloses a signal indicating the number of objects remaining in the container.
- 1.30. With respect to claim 30/24 and 30/25, NELSON additionally discloses a signal output if the number of objects remaining in the container satisfies a predetermined condition.

- 1.31. With respect to claim 31/24 and 31/25, NELSON additionally discloses notifying the first robot that the second holds the object.
- 1.32. With respect to claim 32/24 and 32/25, NELSON additionally discloses the robot notifying the process.
- 1.33. With respect to claim 33/24 and 33/25, NELSON additionally discloses the robot placing objects on a temporary placing table.
- 1.34. With respect to claim 34/24 and 34/25, NELSON additionally discloses the first robot changing position of the container to assist the second robot to eliminate an abnormality which is unable to be eliminated by the second robot.
- 1.35. With respect to claim 35, NELSON discloses holding and taking out a container from the second process, conveying and positioning the held container using a first robot having an articulated arm (912) and hand (910), sequentially holding and taking out objects from the first process, placing the objects in the container using the second robot and conveying the container using the first robot.
- 1.36. With respect to claim 36, NELSON discloses holding and taking out a container from the second process, conveying and positioning the held container using a first robot having an articulated arm (912) and hand (910), sequentially holding and taking out objects from the first process, placing the objects in the container using the second robot, using a sensor, and conveying the container using the first robot.
- 1.37. With respect to claim 37, NELSON additionally discloses the first robot changing position of the container.

- 1.38. With respect to claim 38, NELSON additionally discloses the first robot changing position of the container.
- 1.39. With respect to claim 39/35 and 39/36, NELSON additionally discloses recognizing a position by a sensor.
- 1.40. With respect to claim 40/35 and 40/36, NELSON additionally discloses a signal indicating the number of objects remaining in the container.
- 1.41. With respect to claim 41/35 and 41/36, NELSON additionally discloses a signal output if the number of objects remaining in the container satisfies a predetermined condition.
- 1.42. With respect to claim 42/35 and 42/36, NELSON additionally discloses a notifying the first robot that the object has been placed in the container.
- 1.43. With respect to claim 43/35 and 43/36, NELSON additionally discloses the robot removing objects on a temporary placing table.
- 1.44. With respect to claim 44/35 and 44/36, NELSON additionally discloses the first robot changing position of the container to assist the second robot to eliminate an abnormality which is unable to be eliminated by the second robot.
- 1.45. With respect to claim 45/25 and 45/36, NELSON additionally discloses a visual sensor.
- 1.46. With respect to claim 46/25 and 46/36, NELSON additionally discloses a three-dimensional position sensor.
- 1.47. With respect to claim 47, NELSON discloses a first robot (900) having an articulated arm (912) and hand (910) and second robot (970).

III. Response to Applicant's Arguments

Applicant's arguments entered 6/16/06 and 5/25/06 have been fully considered but are not persuasive.

- 1.1. Applicant argues that NELSON does not anticipate claims 1-2, 12-13, 24-25, 35-36, and 47, as amended, because NELSON does not disclose the limitation added by amendment, namely, an articulated arm and a hand at the distal end thereof. This argument is not persuasive. NELSON discloses an articulated arm (912) and hand (910) within the broadest reasonable interpretation of those terms. The examiner acknowledges the distinction between the arm and hand described in applicant's preferred embodiment and that of NELSON, however, although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims.


IV. Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles N. Greenhut whose telephone number is (571) 272-1517. The examiner can normally be reached on 7:30am - 4:00pm EST.
3. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen D. Lillis can be reached on (571) 272-6928. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.
4. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published

Art Unit: 3652

applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CG



GENE O. CRAWFORD
SUPERVISORY PATENT EXAMINER